

AMENDMENTS

In the Claims

The following is a marked-up version of the claims with the language that is underlined (“ ”) being added and the language that contains strikethrough (“~~—~~”) being deleted:

1. (Canceled)

2. (Currently Amended) An optical system comprising:

an optical device including a first para-electric holographic medium, said first holographic medium storing a first hologram, said first hologram having a first active mode, said first hologram exhibiting said first active mode when a first electric field is applied to said first holographic medium, in said first active mode said first hologram being adapted to direct light incident upon said first para-electric holographic medium to a first location, the first location being arranged off an optical axis of said optical device;

~~The optical system of claim 1,~~ wherein said optical device is adapted to selectively direct light between said first location and a second location arranged along said optical axis, ~~such that~~ said optical device ~~operates being operative~~ as a switch such that an information signal carried by the light and propagated to said optical device is selectively directed to either the first location or the second location by the optical device.

3. (Currently Amended) The optical system of claim 1 2, wherein in said first active mode said first hologram is adapted to focus light incident upon said first para-electric holographic medium to said first location.

4. (Currently Amended) The optical system of claim 1 2, ~~wherein said first location is arranged along an optical axis of said optical device; and~~

wherein said optical device includes a second hologram, said second hologram having a second active mode, said second hologram exhibiting said second active mode in response to a second electric field, in said second active mode said second hologram being adapted to focus light incident upon said optical device ~~to a second location, said second location being arranged along the optical axis of said optical device.~~

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5. (Currently Amended) The optical system of claim 1 2, further comprising:
a first electrode arranged proximate to said first para-electric holographic medium;
a second electrode arranged proximate to said first para-electric holographic medium;
and

a control system electrically communicating with said first electrode and said second electrode, said control system being adapted to apply an electric potential across said first electrode and said second electrode to generate said first electric field.

6. (Currently Amended) The optical system of claim 1 2, further comprising:
means for applying said first electric field across said first para-electric holographic medium.

7. (Canceled)

8. (Currently Amended) The optical system of claim 7 4, wherein said optical device includes a second para-electric holographic medium, said second holographic medium storing said second hologram.

9. (Currently Amended) The optical system of claim 7~~4~~, wherein said first para-electric holographic medium stores said second hologram.

10. (Currently Amended) The optical system of claim 7~~4~~, further comprising:

a first output transmission medium optically communicating with said optical device, said first output transmission medium being adapted to receive at least some of the light propagated to said first location; and

a second output transmission medium optically communicating with said optical device, at least a portion of the second optical transmission medium being aligned with said optical axis of said optical device, said second output transmission medium being adapted to receive at least some of the light propagated to said second location.

11. (Original) The optical system of claim 10, further comprising:

a first input transmission medium optically communicating with said optical device, said first input transmission medium being adapted to propagate light to said optical device.

12. (Currently Amended) A method for selectively altering the propagation of light comprising:

providing a first para-electric holographic medium, the first para-electric holographic medium including a first hologram, the first hologram having a first active mode, in the first active mode the first hologram being adapted to direct light to a first location;

propagating light to the first para-electric holographic medium;

directing light to a second location with the first para-electric holographic medium;

setting the first hologram to the first active mode; and

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directing light to the first location with the first hologram in the first active mode, the first location being different than the second location, wherein the second location is located along an optical axis defined by the first para-electric holographic medium, and the first location is located off the optical axis.

13. (Canceled)

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14. (Original) The method of claim 12, wherein directing light to the first location includes focusing light to the first location.

15. (Canceled)

16. (Original) The method of claim 15, wherein directing light to the first location comprises:

focusing light to the first location; and

wherein directing light to the second location comprises:

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focusing light to the second location.

17. (Original) The method of claim 15, wherein setting the first hologram to the first active mode comprises:

applying a first electric field across the first para-electric holographic medium.

18. (Currently Amended) The method of claim 15, further comprising:

providing a second para-electric holographic medium, the second para-electric holographic medium including a second hologram, the second hologram having a second active mode, in the second active mode the second hologram being adapted to direct light to a third location;

propagating light to the second para-electric holographic medium;

directing light to the first location with the second para-electric holographic medium;

setting the second hologram to the second active mode; and

directing light to the third location with the second hologram in the ~~first~~ second active mode, the third location being different than the second location.

19. (Original) The method of claim 18, wherein setting the second hologram to the second active mode comprises:

setting the first hologram to the first active mode.

20. (Original) The method of claim 12, wherein the first para-electric holographic medium optically communicates with a first output transmission medium and a second output transmission medium; and

further comprising:

receiving at least some of the light propagated to the first location with the first output transmission medium; and

receiving at least some of the light propagated to the second location with the second output transmission medium.

21. (Newly Added) The system of claim 10, wherein said second output transmission medium comprises an optical fiber.

22. (Newly Added) The optical system of claim 11, wherein said first input transmission medium comprises an optical fiber.

23. (Newly Added) The method of claim 12, wherein the light carries an information signal.
